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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,091	02/15/2001	Chung-Yen Lu	3626-0142P	4483

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EXAMINER	
COUSO, YON JUNG	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/783,091	LU, CHUNG-YEN	
	Examiner	Art Unit	
	Yon Couso	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Applicant's arguments filed February 25, 2004 have been fully considered but they are not persuasive.

The amendment made to the specification does not correspond to the specification in file. It appears that the applicant is referring to the paragraph numbers from PG Publication 2002/0097919, the amendments to the specification cannot be entered at his time since there are not corresponding paragraphs as applicant has referred to. Thus, rejection under 35 U.S.C. 112, first paragraph has been maintained.

The new matter issue will be closely examined upon entering of the amendment to the specification.

2. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification is not clear as to what the Z-value is. Page 4, line 14-page 15, line 7 describes Z-value in general. However, from the description it is unclear and confusing as to what the Z-value represents. From the Table 1, it appears that the Z-value is the pixel brightness. However, page 6, line 14-18 describes "Step S33: Judging if the pixel located at the up-most layer of the graphic image in accordance with the Zero-Z test, if Z=0 which indicates that the pixel located at the up-most layer of the graphic image, then jump to step S31, otherwise proceed to Step S34". Moreover, page 4, line 21-page 5, line 4 describes the Z value as threshold values. Please clarify as to

what Z-value stands for in the specification (brightness value, coordinate value or threshold value). It would be essential for understanding the invention and therefore to make and/use of the invention.

With the amendment made to the claims 1 and 4, the Z value is specified to coordinate Z-value. However, it is noted that there is nothing in the specification to explain coordinate Z-value in relation to the X or Y coordinates. Are the coordinate Z-value equals the A(x, y, z), z value in three dimensional coordinate system? If then, how can it also be a threshold value as in page 4, line 21-page 5, line 4 (specification) or pixel brightness (Table 1 in the specification)?

3. Claims 9, 13, and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The subject matter claimed in claims 9, 13, and 18 are deemed to be a new matter. The following embodiments are not taught in the originally filed specification. Referring back to claims 1 and 2, namely the combination of steps a), b), and d) or the combination of steps b) and d) are not taught in the originally filed specification.

4. Claims 6 and 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6, line 3, it is not clear how the determination made.

Claim 16, line 2, it is not clear what the each of the pixel means, since there is only a pixel from the from claim 6.

Claims 17-20 variously depend from an indefinite antecedent claim.

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 2, 4 and 11 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention in the same application. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 2, 4, and 11 covers the same invention.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 6 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Leather (US Patent No. 6,618,048).

As to claim 6, Leather teaches determining whether a pixel needs to undergo filtering or not; and filtering the pixel if the pixel needs to go undergo filtering (column 10, line 42-column 11, line 29).

As to claim 16, Leather teaches that the determining step uses characteristics of each of the pixel (column 10, lines 42-48)

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3, 6-8, 12, 14, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins et al (US Patent No. 4,918,626) in view of Leather (US Patent No. 6,618,048).

As to claims 1, 6, 7, 8, 12, 14, 16, and 17, Watkins teaches a post filtering method for eliminating jagged effects before outputting graphic image in accordance with the characteristics of each of a pixels to prioritize pixels to perform filtering (column 1, line 60 and column 2, line 14). Watkins also teaches calculating distance ΔZ between the planes of the polygons to prioritize the pixels to be filtered (column 4, line 3-column 5, line 10). Even though Watkins does not teach details on judging if a coordinate Z-value of the pixel's is equal to zero, if it is, then not performing filtering to the pixel and if the coordinate Z-value of the pixel is not equal to zero, then judging if the pixel is located at the intersection of a Z-plane, if it is, then performs filtering to the pixel, Watkins discloses calculating distance ΔZ between the planes of the polygons to

prioritize the pixels to be filtered (column 4, line 3-column 5, line 10). Leather teaches performing filtering the pixel based on the Z value of the pixel (column 10, line 42-column 11, line 29). It would have been obvious to one of ordinary skill in the art, given the references at the time the invention was made, to utilize Z-value in determining whether to perform filtering or not as taught in Leather into the Watkins which teaches digital filtering for eliminating jagged effects before outputting graphic image in accordance with the characteristics of each of a pixels. Leather also is directed to reducing undesirable visual artifacts based on the Z-value of the pixel (at least in abstract). Moreover, when Z-value equals zero, there is no plane in z-coordinate to be considered to eliminate the jagged effect of the graphic image.

As per claim 3, Watkins teaches a digital filter (column 2, lines 3-28; column 5, lines1-4; and column 1, lines 30-37).

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Montrym et al and Snyder et al are also cited.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yon Couso whose telephone number is (571) 272-7448. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu, can be reached on (571) 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YJC

VON J. COUSO
PRIMARY EXAMINER

March 20, 2006